

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-27. (Cancelled)

28. (Currently Amended) ~~The method of claim 25 wherein~~ A method of detecting photons, comprising the acts of:

maintaining a superconducting strip below its critical temperature, said superconducting strip is deposited on a substrate defining a first side and an opposite second side, said first side having an antireflective coating, and said second side having said superconducting film-strip deposited thereon;

biasing said superconducting strip below its critical current;

directing at least one photon toward said superconducting strip;

providing a mirror to reflect the at least one photon unto said superconducting strip; and

whereby the superconducting strip detects the at least one photon incident thereon.

29. (Previously presented) The method of claim 28 wherein said antireflective coating is arranged to face said light source.

30-33. (Cancelled)

34. (Currently Amended) ~~The photon detector of claim 31 wherein~~ A photon detector for detecting one or more photons from a light source, the photon detector comprising:

a superconducting film coupled with a substrate, said substrate defines a first side and an opposite second side, said first side having an antireflective coating, and said second side having said superconducting film deposited thereon;

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a mirror optically coupled with the superconducting film, the mirror arranged to reflect the one or more photons toward the superconducting film;

wherein said superconducting film has a dimension which allows detection of the one or more photons when said superconducting film is maintained at a temperature below its critical temperature and biased below its critical current; and

wherein the one or more photons may be directly incident upon the superconducting film or reflected off the mirror onto the superconducting film.

35. (Previously presented) The photon detector of claim 34 wherein said antireflective coating is arranged to face said light source.

36-40. (Cancelled)